

REMARKS

Reconsideration and withdrawal of all grounds of rejection are respectfully requested in view of the above amendments and the following remarks. Claims 1-10, 14-16, 18-19, 22 and 24-29 were rejected. Claims 11-13, 17, 20-21 and 23 were previously cancelled. By entry of this amendment, claims 1, 4, 9, 14, 25, and 27-29 are amended, no claims are cancelled, and no new claims have been added. No new matter has been added to the application. Consequently, claims 1-10, 14-16, 18-19, 22 and 24-29 remain pending.

Claims 4, 14, 25 and 27-29 are objected to because of various informalities. These enumerated claims have been amended pursuant to suggestions made by the Examiner. Consequently, withdraw of these objections is respectfully requested.

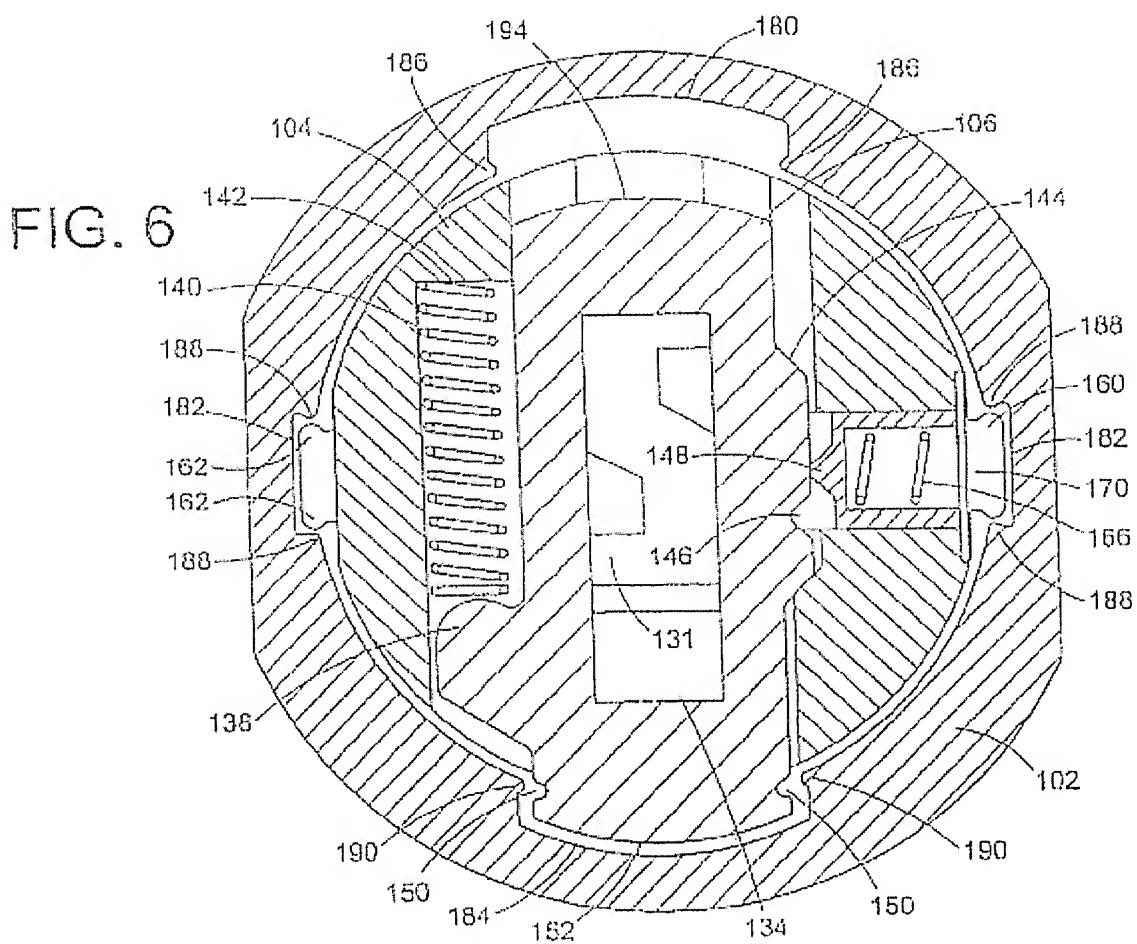
Claims 1-8, 22, 24, 25 and 27-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claims 1 and 4, as well as claim 9, have been amended to better define the invention pursuant to the application as filed.

Claims 1, 4 and 9 have been amended to clarify the invention in regard to preventing engagement of the tumblers with the tumbler cavity for unauthorized “pick resistant” purposes. First, claim 1, 4 and 9 have been amended to define the position of the tumblers shown in Figure 6, shown on the next page. The tumblers 106 and sidebars 110 “extend from the cylinder assembly 100 into cavities in the lock shell 102.” (para. 0028, lines 6-7). In this position, the tumblers 106 and the sidebars 110 are in a rotational position of interference. Second, claims 1 and 4 have been amended to further explain the distinction between “extend into” and “engagement with” as now recited. The application clearly states “the tolerance between the sidebar and the lock shell is less than the tolerance between the tumblers and the lock shell. When rotational torque is applied in the absence of the correct key, the tolerance difference provides for engagement of the sidebar projections with the cavities of the lock shell before the tumblers engage with the lock shell.” (emphasis added) (para. 0007, lines 4-8). In greater detail, “when rotational torque is applied to the cylinder assembly 100 in the absence of the correct key

130, the beveled sides 162 of the sidebars 110 engage with the lock shell 102 before the indentations 150 of the wafer tumblers 106 engage with the lock shell 102. This feature prevents positioning of the wafer tumblers 106 in a position of non-interference by resting the ends of the tumblers 106 on the ledge of the shell 102 along the shear line.” (para. 0028, lines 22-27). In other words, a common lock picking technique is prohibited.

Consequently, withdraw of this rejection is respectfully requested.

As mentioned above, Figure 6 of the present application illustrates an exemplary embodiment of the invention claimed in claim 1.



The lock has a wafer-tumbler construction with two sidebars spring-biased toward the axis of rotation of the lock cylinder. The lock is designed to add a level of security against picking. The lock shell 102 includes four sidewall cavities, a top tumbler cavity 180 and a bottom tumbler cavity 184 aligned for mating with tumblers, and two side cavities 182 arranged for mating with sidebars 160, 162. The side cavities include two projections 188 at the mouth of the cavities 182. As illustrated in a locked position, the sidebars 160, 162 are in a position of rotational interference with the lock shell 102. If rotational torque is placed on the lock cylinder in the absence of a proper key inserted into the key slot, the tumblers will force the sidebar toward the outer edge of the sidebar cavity, and upon engagement with the rounded outer edge surface of the sidebar, lock the sidebars into a position of interference with the shell 102. (See para. 0028). The tolerance between the sidebar and the sidewall cavity is less than the tolerance between the tumblers and the tumbler cavity. (See Fig. 6 and para 0007). As a result, when rotational torque is applied in the absence of the correct key, the tolerance difference provides for engagement of the sidebar projections with the sidewall cavities before the tumblers can engage the tumbler cavity. (See para. 0007).

The Examiner has rejected claim 1 under 35 U.S.C. 103(a) as being unpatentable over Kasper (which relies on Oliver) in view of Raymond et al and Spain. None of the cited references teach or suggest a locking mechanism as recited in claim 1 as now recited. For example, none of the cited references teach or suggest a locking mechanism wherein engagement between a sidebar and a projection in the first position prevents engagement of the tumblers with the tumbler cavity.

For at least the reasons discussed above, it is believed that claim 1 is allowable. Therefore, the undersigned respectfully requests reconsideration of the rejection of claim 1.

For at least the reasons discussed above in regard to claim 1, it is believed that claims 4 and 9 are also allowable. Therefore, the undersigned respectfully requests reconsideration of the rejections of claim 4 and 9. Further, the remaining pending dependent claims are allowable at least based on direct or indirect dependence on allowable independent claims 1, 4 and 9.

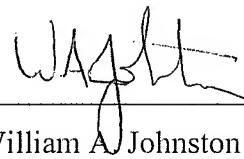
The Examiner has rejected claim 24-26 under 35 U.S.C. 103(a) as being unpatentable over Kasper (which relies on Oliver) in view of Raymond et al and Spain as applied to claims 1, 4 and 9, and further in view of Ritcher. These claims are allowable at least based on direct dependence on allowable independent claims 1, 4 and 9, respectively. Therefore, the undersigned respectfully requests reconsideration of the rejection of claims 24-26.

The Examiner has rejected claim 27-29 under 35 U.S.C. 103(a) as being unpatentable over Kasper (which relies on Oliver) in view of Raymond et al and Spain as applied to claims 1, 4 and 9, and further in view of Ritcher. These claims are allowable at least based on direct dependence on allowable independent claims 1, 4 and 9, respectively. Therefore, the undersigned respectfully requests reconsideration of the rejection of claims 27-29.

In view of the above amendments and remarks, it is respectfully submitted that all pending claims of this application are in condition for allowance. Accordingly, a Notice of Allowance for all pending claims of this application is respectfully solicited. Furthermore, if the Examiner believes that additional discussions or information might advance the prosecution of this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

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